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MANAGEMENT REVIEW

the

JULY, 1947

AMONG THE FEATURES

Is an Early Recession Inevitable?
The Experts View Office Job Evaluation
Organizing a Company Library
Toward Improved Collective Bargaining
Production Control Checklist
Disposal of Peacetime Surpluses
Marketing Research Practices
Salesmen's Expenses
What the Public Thinks of Financial Statements
Current Pension Problems
Story of an Insurance Buyer

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Volume XXXVI

No. 7

JULY, 1947

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GENERAL MANAGEMENT...

Is an Early Recession Inevitable?

FOR some months an increasing number of economists and business men have been predicting a business recession or correction in the near future. Some forecasters expect unemployment to exceed 6 million or more by fall.

Believers in an early recession stress the fact that inventory accumulation has been going on at a rapid rate. During the latter half of 1946, inventories were rising at an annual rate of nearly \$10 billion. This increase could not go on indefinitely. When it ceases, there will be a drop in investment spending, which in turn will mean a drop in consumer incomes or an increase in the supply of finished goods or perhaps something of each.

Those who expect an early recession reinforce arguments by pointing out (1) that prices have risen rapidly since last summer, (2) that the price structure contains many abnormal relationships, and (3) that many of the most urgent accumulated needs for goods have been satisfied. They are convinced that many prices are high enough to arouse considerable buyer resistance and to lead many persons to postpone buying in anticipation of lower prices. Some prices have risen far more than others since the beginning of the war. When the out-of-line prices fall, the decline a likely to be contagious.

The assumptions upon which forecasts of an early recession rest contain important elements of truth. It does not follow, however, that an early recession is inevitable. There are three principal possibilities:

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- 1. The increase in the supply of finished goods relative to incomes or the drop in the importance attached to goods relative to money may produce serious weaknesses in prices, which in turn will produce postponement of commitments and still further weakness in prices. Obviously, this process could easily result in a moderately severe recession.
- 2. The increase in the supply of finished goods relative to income or the drop in the importance attached to goods may occur so gradually and may produce such a slow decline in prices that no postponement of buying occurs.
- 3. The increasing availability of finished goods which follows the end of the accumulation of inventories and the restoration of normal balance between the several stages of production may positively stimulate expenditures, with the result that no drop in prices occurs. A substantial quantity of orders in many lines have been held back because deliveries were too uncertain and difficult. Hence increases in the supply of goods may actually stimulate demand for them.

Which of these three principal possibilities is most likely to occur? Is the demand for goods—industrial equipment, construction, and consumer goods—strong enough and the backlog of unsatisfied demand large enough so that an increase in the supply of finished goods relative to incomes is

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not likely to produce serious weakness in prices and a postponement of commitments?

1. The accumulated needs for producers' durable equipment are very Indeed, during most of the time since 1929 there has been very little net capital formation. During the last quarter of 1946, however, expenditures on industrial equipment were at a high rate-7.6 per cent of the gross national product, in comparison with about 6.5 per cent during most of the twenties. The Securities and Exchange Commission and the Department of Commerce have recently forecast that expenditures of business, exclusive of agriculture, for equipment and plant will be at a slightly lower rate during 1947 than during the last quarter of 1946. If this is true, expenditures on industrial equipment cannot be expected to offset the drop in expenditures for inventories.

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The estimates of the SEC and the Department of Commerce have been quite conservative and have tended to run moderately below reality. Perhaps the principal reason for expecting that equipment expenditures may increase above the last quarter of 1946 is that deliveries will occur more rapidly. As they occur and as enterprises obtain the benefit of lower production costs for the use of new equipment, they will tend to increase their outlays. The rising wages of production labor will also tend to stimulate purchases of industrial equipment. If the recession in business which many people expect were to occur, some expenditures on equipment would undoubtedly be cur-No one, however, seems to expect a long recession. All in all, I am inclined to take a somewhat more optimistic view of expenditures on equipment than does the SEC and the Department of Commerce. Nevertheless, in view of the high current rate of such expenditures, one should not expect great help from the rise in these expenditures in offsetting a drop in the outlook for inventories.

2. Will improvements in the conditions of construction stimulate expenditures on building or will they induce postponement of an ever-increasing number of building plans in expectation that building conditions will improve even more? This is one of the most important uncertainties in the business outlook. My guess is that residential construction will be slow in responding to lower and more certain production costs. Industrial and commercial building, however, is another The growing availability of industrial equipment increases the attractiveness of new construction to business concerns. Rising labor costs increase the gains of getting goods made under conditions which are highly favorable for labor efficiency. enterprise which gets new plants completed ahead of its rivals often gains important competitive advantages. In view of the great need for industrial construction and the large quantity of such construction planned for the next few years, no one should be surprised at a fairly quick and substantial response of commercial and industrial construction to lower costs and more predictable conditions.

3. Consumer goods expenditures will probably increase—to 91 per cent or 92 per cent of incomes after taxes. At the incomes of late 1946, these expenditures may be expected to rise \$2 to \$3 billion a year above the rate of the last quarter of 1946.

It is true that the accumulated needs for a few varieties of consumer goods, such as shoes and some articles of women's apparel, seem largely to have been met. Accumulated needs for many kinds of non-durable goods, however, will not be satisfied until late in the year. The shortages of durable consumer goods are enormous, and several years will be required to make them up.

What is the conclusion concerning the short-run business outlook? Certainly business prospects are far more uncertain than they have been in many months. An early end to inventory accumulation seems to be in prospect. High and uncertain construction costs must be regarded as a serious weakness in the general business situation. I am somewhat more optimistic on the outlook for construction than many forecasters. The brightest spot in the business outlook is the large unsatisfied demand for durable consumer goods.

From the long-range viewpoint, our economy is highly dynamic. For the last 70 years, physicists, chemists, and engineers have been increasing from 10 to 14 times as fast as the gainfully employed. Nine times as much was spent on industrial research in 1939

as in 1920. One consequence of the dynamic nature of the economy is rapid increases in output.

During the next generation the performance of the American economy will be compared with that of the Russian and European economies. This comparison should be good for us. I have great confidence in the ability of the American economy to raise output per man-hour faster than any other economy. The American economy has the tremendous advantage of possessing 3.5 million business enterprises outside of agriculture and about 6 million in agriculture. This means that our economy has nearly 10 million places where innovations may be authorized and where experiments may be tried. No regimented economy can hope to compete in dynamic drive with an economy which possesses nearly 10 million centers of initiative.

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From an address by Sumner H. Slichter before the National Association of Mutual Savings Banks.

Balanced Budgets Are Not So Normal

A HISTORY-MINDED researcher poking into the record has found that a balanced national budget isn't quite so normal as many people believe.

The government's statistics on the subject go back to 1789, when the Treasury Department was established. They reveal that, of the 158 federal fiscal years on record, 96 ended with a budget surplus; but 62, including three years during Washington's two terms ended with a deficit

Washington's two terms, ended with a deficit.

Balanced-budget years had three notably long runs. The first was from 1825 through 1836. The second, and longest unbroken run, was from 1866 to 1893. Those were the golden days of national expansion and the winning of the West. Total receipts for the 28-year span were \$10,206,687,403; total surpluses, \$1.824,787.153.

The third surplus era began with the boom after World War I and ended in 1930. One of those 11 years set an all-time one-year surplus high of \$1,155,364,766, and this after \$519,554,845 had been applied to debt retirement. That was 1927, in the reign of Calvin the Thrifty.

the reign of Calvin the Thrifty.

Of the 62 red-ink years, war periods (fiscal years with war expenditures) account for 20, with another, fiscal 1947, in prospect. The Great Depression accounted for 10 more. That blended right into World War II and deficits beyond the wildest imaginings of our grandfathers.

the wildest imaginings of our grandfathers.

If we assume a \$2,000,000,000 deficit for fiscal 1947, the government's total deficit for the seven-year period encompassing World War II will be approximately \$208,000,000,000.

-Kiplinger Mayazine 4/47

OFFICE MANAGEMENT..

Some Experts View Clerical Job Evaluation

By SIDNEY C. SUFRIN
Associate Professor, Syracuse University;
Consultant, Dayton Rubber Company

In PREPARING an address on job evaluation to the Dayton, Ohio, Chapter of the National Office Management Association last fall, Mr. Fred E. Shelton, of the Standard Register Company, circulated a questionnaire to 10 outstanding job evaluation experts. The questions related to job evaluation of office employees. Eight of the persons polled are actively engaged in personnel work in industry; the remaining two are university professors who, in addition to teaching, have engaged in industrial consultation.

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The purpose of this note is to present the reactions and views of the respondents to the questions. Where a respondent answered a question in more than one way, all the answers are recorded. A brief comment will be offered on the answers at the conclusion of this note.

I. The first question asked was: What are the basic requirements of successful application of a job evaluation program in the office?

5 answers indicated that a careful program of research and study was essential to a successful plan.

3 answers indicated that a clear understanding of the program by the employees is basic.

administrative control of the plan in operation was essential.

3 answers indicated that competent job analysts to do the evaluation were essential. 2 answers indicated that the full, unswerving support of management is essential.

2 answers indicated that employee participation in the plan is essential.

2 answers indicated that the purpose of the plan—i.e., intent of job evaluation must be completely understood by all concerned if the plan is to work.

2 answers indicated that the minimum job requirements should be all that is attempted in the evaluation procedure.
 1 answer indicated that the job evalua-

1 answer indicated that the job evaluation program should be tailor-made for the company in question.

answer indicated that the program should avoid "appeasement" in rating.

answer indicated that application of occupational rates and rate ranges should be fair to the employees.

l answer indicated that care must be exercised to avoid confusion between job requirements and workers' ability.

II. The second question asked was: Is it absolutely necessary to have a written merit rating plan to operate a successful job evaluation program in the office?

6 answers were in the negative.

2 answers indicated that there was no connection between the two.

2 answers indicated that merit rating and job evaluation are different things but go together in the sense that a successful merit rating plan makes job evaluation easier, and vice versa.

III. The third question was: What is the largest salary which should be included in a clerical job evaluation program?

5 answers indicated that each company must decide this as a matter of policy.

2 answers said no limits on the size of salary should be set in job evaluation.

1 answer indicated between \$8,500 and \$10,000.

1 answer indicated \$6,000. 1 answer indicated \$5,000. 1 answer indicated \$4,000.

1 respondent indicated that the question could not be answered in a general way, but suggested that job evaluation apply to all employees covered by the Fair Labor Standards Act.

1 respondent indicated that, theoretically, all jobs might be covered but that, in practice, \$10,000 seemed a reasonable

limit.

IV. The fourth question was: How many jobs in the office can one job analyst handle? This question caused some confusion, since it is not clear whether the question implies how many jobs can one analyst analyze or how many jobs can one analyst maintain evaluations for. With respect to study and write-up of jobs:

2 answers indicated that one analyst can analyze four to five jobs a day.

2 answers indicated that one analyst can analyze between two and three jobs a day.

1 answer indicated that one analyst can analyze one job daily.

With respect to the maintenance of job evaluations:

1 answer indicated that this depends upon the nature of the company and jobs.

2 answers indicated one analyst can handle the maintenance work on 1,000 jobs.

1 answer indicated that one job analyst can handle in the neighborhood of some

300 to 320 jobs.

V. The fifth question was: What should a job description include to be considered a good description for an office job?

2 answers indicated that the duties of the job should be clearly set forth.

2 answers indicated that a general statement of a job sufficient to identify it is all that is needed.

1 answer indicated that the job should be analyzed in sufficient detail to identify

1 answer suggested that the job description be merely a check list of skills required on the job. 1 answer suggested that the job description be broken down into three parts:
(a) identification, (b) function, (c) minimum qualifications for the job.

1 answer suggested the following 10 factors: (a) education, (b) experience, (c) complexity of duty, (d) supervision received, (e) errors, (f) contact with others, (g) confidential data, (h) mental and visual demands, (i) working conditions, (j) (for supervisory positions) character and scope of supervision.

VI. The sixth question was: Is it desirable to develop rate ranges in predetermined, graded, ascending steps from minimum to maximum for merit upgrading?

4 replied affirmatively to this question, two of the four qualifying their answers. One qualification was that the predetermined steps would apply whether advance was by merit rating or automatic. The other qualification was that the ascending steps should be geometric rather than arithmetic to provide equal relative adjustments.

1 answer indicated that predetermined ascending steps were not necessary but

were helpful.

1 respondent, in a sense, dodged the question by indicating that this was com-

monly done.

1 respondent indicated that the advisability of setting up predetermined ascending steps depended upon the wage structure, such steps being suggested if the difference between the minimum and maximum of each job was great.

VII. The seventh question was: Should rate ranges and labor grades be made known to each employee?

This question was unanimously answered in the affirmative by all the respondents. However, several indicated that rate ranges and labor grades need not be published but should be made available upon request.

VIII. The eighth question was: What are the possibilities that a job evaluation program in the office will have a "killing" effect on individual initiative?

All the respondents answered this in the

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negative. There was a tendency, however, to indicate that care must be exercised in the administration of the program to assure promotions to high grades for competent people.

IX. The ninth question was: Should employees be automatically raised to the minimum of the labor grade when they are upgraded, even if the jump is more than one labor grade?

6 answers indicated yes.

1 answer indicated this is a matter of

company policy.

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1 answer suggested that to do so would be conducive to simplicity in operation. 1 answer indicated that upgraded employees may move to a point above the minimum of the grade if there is an overlapping of wages for contiguous grades.

1 answer suggested that under no circumstances should employees be jumped

more than one grade.

ANALYSIS OF RESPONSES

I. The replies to the first question (What are the basic requirements of successful application of a job evaluation program in the office?) indicated that the respondents did not believe a single simple answer could be given to this question. The success of a job evaluation program is determined by the same factors as that of any other program which directly affects a group of people. The program must be thought through, must enjoy the support of all concerned, must be trusted, and must be carefully administered. These attributes of a successful program are so general as to be of little specific value to anyone concerned with instituting a job evaluation program.

II. While the general feeling of the respondents was negative to the second question (Is it absolutely necessary to have a written merit rating plan to operate a successful job evaluation program in the office?) there was a feeling on the part of most respondents

that, while the two are different, both are essential for the successful operation of a complete program of salary administration. None of the respondents felt constrained to suggest that the problems of merit rating are extremely difficult and by no means solved in industry, and the abuse and misuse of ingrade promotion techniques can have injurious effects on the broader program of salary administration.

III. The answers split on the third question (What is the largest salary which should be included in a job evaluation program in the office?), about one-half of the respondents simply saying this was a matter of company policy. That is merely another way of saying that objective criteria have not as yet been developed. Those who attempted to answer the question specifically gave a salary range of \$4,000 to \$10,000, which again indicates that no unanimity exists on the upper limit of job evaluation.

As was indicated, the respondents were not clear as to whether the fourth question meant how many jobs can one analyst initially handle or how many jobs can he administer. who interpreted the question to mean initial analysis vary from a maximum of five jobs daily to a minimum of one job a day, a range which would not be a helpful guide to a firm intending to There was an hire job analysts. equally large difference in the answers which viewed the question in the administrative sense. This range was from 300 to 1,000 jobs, though one respondent indicated that the nature of the company and the jobs would determine the answer.

V. Only the last two recorded answers to the fifth question (What should a job description include to be considered a good description for an

office job?) provide much assistance to one concerned with job descriptions. However, this question was, in a sense, answered by all the respondents who indicated that mere recognition of the job by the job description was more important than a complete detailed breakdown of every aspect of the job.

In general, there was affirmative agreement on the sixth question (Is it desirable to divide the rate range in predetermined, graded, ascending steps from minimum to maximum for merit upgrading?), only one respondent supporting the position taken by the present writer in an article prepared for the March issue of PESONNEL.* The brief answers of the majority of respondents did not sway the present writer's belief that adjustments within any grade should reflect market conditions rather than some predetermined, arbitrary set of steps.

All the respondents answered the seventh question (Should the rate ranges and labor grades be made known to each employee?) in the affirmative.

" "An Economist Looks at Job Evaluation," p. 302.

This is a most hopeful sign, since if the data are not made known, the working force will invent a set of conditions which in no way approximates the true ones. This might react badly on the operation of the organization.

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While all the respondents answered the eighth question (What are the possibilities that a fixed job evaluation program in the office will have a "killing" effect on individual initiative?) in the negative, all were aware of the possibility that the employees might feel their jobs were blind-alley This feeling, it was indicated. could be abolished by appropriate administration techniques, such as "promotions from within."

IX. In effect, all respondents agreed on an affirmative answer to the ninth question (Should employees be automatically raised to the minimum of the labor grade when they are upgraded, even if the jump is more than one labor grade?). The only doubt was whether it is ever wise to jump an employee a grade. This must again be referred to company policy, in the opinion of the writer.

Organizing a Special Business Library By the SPECIAL LIBRARIES ASSOCIATION

A NY plan for the establishment of a special library in business or industry must take into account the nature of the organization to be served, and the ways in which it is to be served. In simplest terms, the function of the company library is a dual one: (a) to furnish quickly and accurately to any executive or employee needed information pertinent to company policy, operation, or program of development;

and (b) to act as the central depository of the organization's literature, both published (books, periodicals, pamphlets, patents) and internal (research reports, laboratory notebooks, etc.). In many instances, the special library serves also as a lending agency for books of general interest for recreation and self-education—the collection in this field being either maintained by

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the company or deposited by a neighboring public library.

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The library's services are varied:

Furnishing factual answers to spot information requests; keeping executives and supervisors informed of develop-ments in their special fields by scanning and routing periodicals, books, or news items to the attention of those concerned: making literature searches on any subject; clipping newspapers and periodicals and establishing an information file for ready reference by subject; preparing abstracts of periodical articles, either as a regular program or on special demand; preparing reading lists and bibliographies; reading book reviews and evaluating new publications for recommendation to purchase in the general business, labor, and technical fields; making readily available by means of efficient cataloging and other modern library procedures the company's collection of published and unpublished materials, and controlling them by proper circulation and loan records; borrowing books not in the company's library from other libraries and through membership in the Special Libraries Association.

LOCATION AND SPACE REQUIREMENTS

The library should be so located that its clientele will not be disturbed by noise or vibration of heavy machinery or fumes from chemical operations. Adequate natural light and strong floors (since library materials are heavy) are other factors that must be considered in selecting a location. In addition, the location should be such that expansion of space for any one or all of the library's functional areas is possible without complete relocation (with attendant costs and temporary inefficiencies) in less than six or eight years.

In determining space requirements, provision must be made for four functional areas: reading, work (cataloging, indexing, typing, ordering), service (circulation, reference), and storage.

The reading area must provide table space for a predetermined number of readers, and passageways of 3½ to 4 feet at the ends of tables and at least 5 feet between tables. A table for four readers should be 5 by 4 feet as a minimum, with 6 by 4 feet the maximum. Microfilm readers or other similar special equipment will also be placed in the reading area.

For work areas, provision of 100 square feet per person will generally afford sufficient space for desks, type-writer stands, book cases, work tables, and passageways.

The service area must provide for circulation and reference work and their resulting records, card catalogs, periodical and book display racks, dictionary stands, and shelving for the reference collection.

The storage area must provide shelving for books and periodicals, and filing cabinets for pamphlets, clippings, reand documents. Experience shows that, on the average, seven technical books or five volumes of bound periodicals can be shelved per linear foot. Shelving should be not more than 7 feet 6 inches in height, and filing cabinets not more than five drawers high; aisles between facing book shelves should be 30 to 36 inches, and between facing filing cabinets 36 to 48 inches. If the quantity of confidential material is large, it may be necessary to provide a separate locked room and catalog for it.

EQUIPMENT

In addition to the equipment indicated in the foregoing section, the following are major items that should be taken into consideration in the planning of the library for its first few years: Desks and desk chairs for work and service Tables and chairs for readers Typewriters and stands Periodical and book display racks Filing cabinets

Book shelves Book trucks Dictionary stands Telephones Card catalog cabinets Microfilm reader Duplicating epuipment Supply cabinets

BOOK STOCK

The book collection should be wellrounded. though selective, in the general fields of economics, labor, personnel management, and trade, and inclusive in the special subject areas pertaining to the specific organization. It should include publications of the principal professional and research societies in the appropriate subject fields, as well as separate monographs. this connection, it should be noted that the Federal Government supplies valuable monographs and statistical compilations in great variety at little cost.

A small basic reference collection will be needed which should include: a good general encyclopedia, an unabridged English dictionary, foreign language dictionaries as needed, biographic encyclopedias of the Who's Who type, yearbooks and almanacs, directories, cyclopedias of quotations, financial or business services, statistical handbooks. In addition to the special indexes usually available in subject fields, certain basic bibliographic tools will be required-e.g., Cumulative Book Index, Industrial Arts Index, and Readers' Guide to Periodical Literature: 1 Technical Book Review Index and Special Library Resources; Public Affairs Information Service: New York Times Index. Where an adequate public library is a near neighbor, it will frequently accept the responsibility for reference work in certain general fields in return for reciprocal courtesies in special subject areas.

JOURNALS AND MEMBERSHIPS

Every special library needs a fairly extensive list of journal subscriptions. As received, these issues should be routed to key personnel for immediate examination and returned to the library for filing and future reference. The most important titles will be found as soon as volumes are complete; others may be kept unbound, or significant papers clipped for a subject file. Periodicals not needed constantly may in some cases be given to the public library, which will bind and preserve them and make them available on loan to the special library in return for the privilege of having the material in its collection without subscription cost.

Where firms maintain memberships

in scientific and technical societies and research organizations (e.g., American Management Association, American Chemical Society, American Society for Testing Materials, The Conference Board, Society of Automotive Engineers, U. S. Chamber of Commerce), it is advisable to have the society publications sent to the library so that they will be properly recorded and made available to the entire organization. An institutional membership in the Special Libraries Association will secure its publications and give the library the benefit of its cooperative services as well as afford the librarian opportunity to meet and discuss problems with others in similar positions. The Association's professional journal, Special Libraries, contains articles on various types of special libraries, methods, new publications, and equipment.

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All available from The H. W. Wilson Company, New York, N. Y.

Both published by the Special Libraries Associa-tion, New York, N. Y.

Public Affairs Information Service, 11 West 40th Street, New York, N. Y.

STAFF AND ADMINISTRATION

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At its inception the library should have a staff of not less than two persons; a professional librarian—trained, if possible, in both library service and the appropriate subject field—and a clerk-typist or stenographer. The first staff addition will doubtless be a trained library assistant, after which the desirable ratio of trained librarians to clerical personnel will be determined by the librarian.

The aims of the library should be stated clearly and fully in a management directive, and the authority and responsibility of the librarian defined; in his own professional and technical field he should be given the same authority as other administrative specialists, and the same support from man-He should be directly agement. responsible for successful operation of the library to a single management representative, such as the director of research, the general manager, the director of training, or an executive vicepresident. An advisory committee representative of the various classes of library users is frequently helpful to all concerned.

BUDGET

Any organization considering the establishment of its own library should

be prepared to budget approximately \$15,000 per year for the first two or three years (exclusive of charges for space rent and maintenance). As the original book collection is secured and furniture and equipment needs are met, it may be possible to lower certain items in the budget, but the only reliable guide to the budgetary needs of the special library is its place in the whole organizational scheme and its proved value.

A representative budget providing only a limited amount of specialized service, for the first few years of library operations, follows. Additional funds for the purchase of the original book stock will facilitate its assembly and enable the staff to give more complete service at an earlier date.

Budget	
Salaries	
Librarian \$4,000 Clerk (subject to local	
practice) estimate 1,800	\$5,800
Collections	
Books and pamphlets 2,500 Periodicals and member-	
ships 3,000	
Binding 400	5,900
Furniture and Equipment	2,000
Public Relations	750
Convention and Travel	250
Library Supplies	200
Miscellaneous	150
Total	\$15,050

Interviews Recorded to Avoid Disputes

FOR greater accuracy and better records, the Van Norman Co., Springfield, Mass., makes sound recordings of all interviews with prospective employees. Job applicants are told that the questions put to them, and their answers, are being transcribed. The transcriptions are permanent records and can be played back if any question regarding the placement interview ever arises.

back if any question regarding the placement interview ever arises.

Leo F. Hunderup, first v.-p. of Van Norman, reports that, with this system, job applicants' answers to interviewers' questions are more nearly accurate. And the company regards the permanent records as good protection against any possible future attack raised by a job applicant on the company under the Massachusetts Fair Employment Practices Law.

-Modern Industry 6/15/47

PERSONNEL...

How to Make Collective Bargaining More Effective

THE POSSIBILITIES of improving the effectiveness of collective bargaining are immense. Mr. H. W. Steinkraus, president of the Bridgeport Brass Company, recently said: "We haven't begun to more than scratch the surface of what we can accomplish by negotiation. We hardly have learned how to bargain collectively at all. We are just experimenting and beginning to prove its effectiveness. An untold future lies before us when we can make the greatest gains for labor relations through this intelligent means."

What practical steps might be taken by employers and trade unions to make collective bargaining operate more successfully? A number of specific steps for consideration by employers and trade unions are suggested below:

1. Select negotiators who are temperamentally qualified to do the job—men who keep their tempers in the give and take of the bargaining table, who have insight into human nature, who are able to understand the problems of the other side and are willing to hear its arguments with patience, who are men of goodwill with a strong determination to discover a basis for agreement. Personal qualities are fully as important in negotiating as in selling.

2. Give negotiators adequate authority.—Sometimes the two sides bind their representatives too closely by instructions not to concede this or that. Sometimes they give their representatives authority to say "No" but not authority to say "Yes." Both

unions and employers are guilty of unduly restricting the authority of their negotiators. It is often necessary for the union to provide that the terms agreed to by its representatives will be submitted for ratification to the rank and file, but the representatives should not be unduly restricted in the terms which they are authorized to accept for submission to the members. The practice of incorporating rules fixing certain terms of employment (such as apprentice ratios, prohibitions of incentive systems, limits on the workweek, seniority rules) in union constitutions or by-laws and then refusing to bargain over them restricts the scope of collective bargaining and should be minimized. Inflexible company policies may also stand as a barrier to satisfactory bargaining.

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Sometimes the process of negotiation is impaired by uniform national policies which unduly limit the latitude of negotiators in dealing with local conditions which would appropriately call for local treatment. Some uniform national policies, of course, are necessary, but the number of such policies in both corporations and unions has been growing rapidly and is probably too large.

At the outset of negotiations, the parties should exchange definite information concerning the authority of negotiators, especially when any agreement reached by them must be referred to others for confirmation or ratification.

The Management Review

3. Keep the negotiating body small—not more than five on each side, and preferably not more than three. One person should be designated to do the talking for each side. The number of observers should be kept small, because a large audience encourages the making of speeches and talking to the gallery.

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- 4. Avoid taking public positions in advance of negotiations.—It is a mistake for the employer to announce that he will "never" concede this, or for the union to announce that it "must" gain a certain change in the contract and that it will not consider anything less.
- Avoid taking strike votes before the process of negotiation begins or before an impasse has been reached and conciliation has been requested .-The Smith-Connally Act has had an unfortunate effect in promoting the practice of early strike votes. Each side should regard a strike or a lockout as a remote possibility, to be considered only as a last resort after ingenuity and patience have failed to find an alternative. A strike vote before hearing the arguments of the other side is inconsistent with an attempt to settle differences on the basis of an appeal to what is fair.
- 6. Avoid unnecessary delays in beginning negotiations and in conducting them.—Stalling by one side or another gives rise to antagonisms. If delay is necessary, let the side which needs it ask for the delay and state its reasons. It is helpful when the date for the completion of negotiations can be agreed upon.
- 7. Begin negotiations whenever possible by presenting problems and making proposals rather than offering

"demands" or "demanding rights."—
It is true that there are certain basic rights on which each side must insist. Both sides should recognize, however, that negotiations are likely to be more successful if problems are presented rather than rights demanded. The question, "What are we going to do about such and such a problem?", elicits a hunt for remedies rather than a battle of rights. It sets the stage for the discussion of how to get certain things done or how to prevent certain things from happening.

8. Make a record each day of agreements reached or tentatively reached, but it is not generally desirable to introduce stenographers or mechanical recording devices into negotiations. Recording the discussion encourages people to speak for the record and to avoid direct and normal negotiation. It creates suspicion as to the ultimate use of the record. Negotiations should not be used as a forum to make aggressive and antagonistic speeches to be passed along to constituents.

9. Insist that facts and arguments be offered.—Welcome facts and arguments which are presented by the other side. Sponsor collection of facts by neutral auspices for the use of both sides. Concede agreement with facts and arguments regardless of whether this agreement carries agreement concerning conclusions.

10. The employer should make proposals as well as the union, in case he believes that the agreement should be changed. Some employers have assumed that proposals should come from the unions and have contented themselves by simply saying "No" to certain or all proposals. Proposals on the part of employers introduce flexibility into the negotiations and help

create opportunities to grant the key proposals of the union on terms which are acceptable to the employer.

11. Recognize that negotiations may result in changing your mind.—This means that each side must not expect to come out of the negotiations with everything it asked for. Hence, neither side should definitely regard its proposal as the minimum terms which it is willing to accept.

12. Be prepared to get results gradually.—Each side is likely to desire to have more changes considered than would be practicable to make in one negotiation. One of the purposes of the negotiations should be to determine which proposals should be adopted and which should be postponed. The success of collective bargaining is also aided when each side has an opportunity to prepare its constituents to accept proposals offered by the other.

13. Preserve good manners and keep discussion focused on relevant issues.—This prevents the will to settle from being impaired by "pounding the table" and by threats. A chairman of the conference can preserve good manners if he wishes, but it is desirable that both sides fortify him with

clear and definite instructions on this point.

In case a union and employer are negotiating their first contract, certain special procedures are useful. early conference should be held at which the terms of the contract are not discussed. It should have the purpose of helping the parties become acquainted with each other. At the time a first contract is negotiated, it is particularly important that the union be represented by experienced negotiators from the national office. Conferences for negotiations should be arranged as early as possible after the preliminary conference. The union should submit written proposals to the employer as early as possible. One conference may be held for the union to explain its proposals. The company should submit written counterproposals as soon as possible. Negotiations will proceed more smoothly if at the outset agreement can be reached concerning the effective date when any wage increase may be agreed to.

From Massachusetts Proposals for Better Industrial Relations (a reprint of the Report of the Governor's Labor-Management Committee). The New England Council, Boston, 1947.

Wages of American and Foreign Workers

COMPARISONS of the wages of American workers with those of workers abroad, based upon compilations of the Bureau of Labor Statistics, show how well off wage earners in this country really are. Not only do they receive much higher wage rates, but their wages buy more.

At the present time the average factory worker in this country is paid \$46.40 for a 40-hour week. Despite the increased cost of living which we have experienced in the last several years, this weekly wage will buy more than the average

weekly wage of our workers before the war.

Across the border in Canada, the average 40-hour earnings of the factory worker are \$29.20. Canada has not experienced quite such a large increase in living costs as we have in this country. Therefore, a Canadian's 40-hour pay of \$29.20 brings him closer to the buying power of the American worker than the difference in their actual 40-hour earnings would indicate.

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Across the water in Great Britain, the average factory worker makes only about one-third as much as an American worker, his 40-hour pay amounting to \$17.60. In England a dollar will buy more than a dollar in the United States, but the purchasing power of the British worker is only about half of that of the American worker.

The 40-hour pay of the average factory worker in the Netherlands is \$12.80. In Sweden 40 hours of work will yield the average worker \$18.40.

The French factory worker earns an average of \$16.40 for 40 hours' work. The average pay of the factory worker in Czechoslovakia is only \$8.40. That

is less than one-fifth of what an American worker gets for 40 hours.

—Management Information 5/12/47

Community Relations Pays Off

HAILED by the press as "one of the most interesting and significant chapters in the history of American industry" is Allegheny Ludlum Steel Corporation's program to give its employees and community neighbors straight-from-the-shoulder facts about its operations and aspirations.

As an initial step, the managers of the company's four largest plants held meetings with their foremen, at which all present answered questionnaires covering the company and the industry, the managers explained the program and enlisted the supervisors' aid in relaying the facts to all employees, and the tabulated results of

the questionnaires were presented along with the correct answers.

Each plant manager wrote a personal letter to the "thought-creating leaders" in his community, extending an invitation to meet with the president and executive staff of the company on a specific afternoon, and explaining that the group was limited only because of lack of seating capacity at the available meeting place. Cordial invitations were extended also to the company's local union officials.

A series of five consecutive daily full-page ads were then run in each local newspaper. The first ad outlined four factors which guide the company's operating procedures and which make up the theme of the entire program. Each subsequent ad stressed one of these four factors. Following is a summary of the ads:

1. "We Have a Sincere Regard for Our Employees and the Communities in Which They Live." The facts listed stressed steady employment, hospitalization,

group insurance, plant safety, and boosting the community.

2. "We Pay Good Wages." The facts to substantiate this statement included comparison of the company's average hourly and weekly wages with those of 51 manufacturing industries.

3. "We Make Fair Profits." Here the company's total receipts per employee for each employee week worked, based on the first nine months of 1946, were

balanced against its itemized expenditures.

4. "We Want to Prevent a Boom and Bust" by holding down raw material and labor costs and avoiding higher prices which lead to fewer sales, less profit, less

employment, smaller payrolls.

Opinions of the invited guests at the community meeting, on such subjects as company profits, employment policies, wage policy, were solicited by questionnaire The results of the survey and correct answers were announced at the meeting by the firm's president, who presented a complete and factual picture of the business, its plans and their effect on the community.

Immediately after the public meeting in each community, letters over each plant manager's signature were sent to every person who had attended, along with an eight-page booklet summarizing the four factors around which the program was built and featuring the company's simplified statement of its operations. The same

booklet was mailed to each employee.

-Allegheny Ludlum Quarterly 1/4/47

 STRIKE CONTROL: The Toledo, Ohio, municipally sponsored labor-management committee is said to have averted at least 20 strikes through its efforts in nearly 50 labor disputes since last July. The city was strike-free between October 17 and March 1.

-Commerce 4/47

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Employer Practices Regarding Engineering Graduates

TO LEARN directly from a representative group of employers their attitudes and policies regarding selection, training, placement, advancement, guidance and professional activities of engineering-graduate employees, a survey was initiated by a subcommittee of the Engineers Joint Council's Committee on the Economic Status of the Engineer.

Before canvassing industry on a large scale, a trial questionnaire was sent in May, 1946, to 174 employers of engineers, including small and large organizations: Replies were received from 104 employers in 19 industrial fields up to August 1, 1946.* Collectively, the 104 respondents employ more than 2,000,000 persons, of whom

about 40,000 are engineers.

Who Are Hired? Ninety-six per cent of the respondents employ cadet engineers directly upon graduation from engineering schools, but only 4 per cent recruit their engineering staffs exclusively from the new graduates. About 43 per cent hire more than half their new engineer employees after one or more years' experience with other employers. This is evidently a matter of necessity or expediency rather than preference, because more than 60 per cent of those reporting indicate they prefer to hire the new graduate.

How Are Cadet Engineers Recruited? Seventy per cent of those replying send to engineering schools renresentatives who interview students individually; nearly all these also discuss the candidates personally with members of the college faculties.

Other means of recruiting new graduates are apparently of little avail. The other methods reported, in descending order of effectiveness, are: voluntary applications, advertising, summer employment of students, employment agencies. and recommendations friends.

How Are Experienced Engineers for Specific Openings Obtained? For filling specific openings, advertising is used by 50 per cent of those replying and employment agencies by 35 per cent; 35 per cent also utilize the facilities of Engineering Societies Personnel Service, Inc.; 18 per cent consult placement bureaus; and 12 per cent report that their present employees bring men

How Are Engineering Employees Selected? Twenty-five per cent do not differentiate between engineers and other employees in the process of hiring. The other 75 per cent rely chiefly on personal interviews between the candidates and engineering executives, though 20 per cent employ aptitude or other tests for evaluating the applicant's ability. Only two companies report that engineers are hired without meeting at least one executive engineer.

Of those who rely on interviews with engineering executives, 35 per cent depend on the judgment of a single executive and less than 50 per cent indicate that the candidate is interviewed by an engineer as high in rank as divi-

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conditions existing in the employment field prior to and, to some extent, at the time of this survey are evidenced by the fact that 51 per cent of the respondents invite students to visit their plants at company expense.

^{*} Colleges were included in the survey, as they, too, employ the graduates of their own or other schools as well as those who return from industry to teach.

sional head or assistant chief engineer. On the other hand, several companies report that each candidate is interviewed by several responsible engineers, including the top-ranking engineering executive.

On What Bases Are Engineering Employees Selected? The questionnaire listed nine items presumably considered when selecting an engineering employee, asking that the order of importance given each in arriving at an over-all evaluation be indicated. From a statistical analysis of the replies, weighting the first, second, and lower choices in the way that preferential ballots are usually counted, the considerations which carry the most weight in selecting a candidate for an engineering position, in the order of their importance, are as follows: (1) personality; (2) scholastic record; (3) indicated promise of development in specific field of engineering; (4) engineering experience; (5) evidence of ability to cooperate with others; (6) recommendations by qualified persons; (7) indicated promise of executive development; (8) standing of college from which candidate was graduated; (9) salary requested.

If only first choices are considered, the order of preference is somewhat changed, engineering experience ranking second instead of fourth, but personality still leads the list. ence would no doubt rank higher and scholastic record lower, if it were not for the fact that the employment of recent graduates is uppermost in the minds of those seeking to increase their

engineering forces.

What Is the Prevailing Policy in Regard to Starting Salaries and Advance-Twenty per cent of the respondents indicated that every new engineer is regarded as a special case and starting salary is based on his particular qualifications. The others were about equally divided between those who are influenced by prevailing rates in other companies and those who indicate that their salary scales are arrived at independently.

No company reports a starting monthly salary of less than \$150, and only four less than \$175. Five companies report starting salaries above \$250. The median (50 per cent level) is approximately \$207 per month.

In regard to advancement after initial employment, only 26 of the cooperators gave data. They were all within 12 industries, but none had enough data to indicate a reliably consistent trend for the individual industry, therefore they were grouped and the average rate of advancement is approximately as follows:

MEDIAN —						
	inimum percent- age			Maximum percent- age		
At the end of 6 months	2.5	8.0	\$16.60	14.3		
At the end of 12 months At the end of	3.6	14.6	30.30	28.6		
18 months At the end of	7.5	24.2	50.00	42.9		
24 months	10.0	29.2	60.40	57.2		

In lieu of, or in addition to, standard increases, 76 per cent of the respondents report that periodic reviews are made to determine salary increases on a merit basis, and 24 per cent are guided chiefly by recommendation of Less than 7 per cent insuperiors. dicate that adjustments are made to meet competition and retain capable men.

What Is Done for Technical and Professional Development of Engineer Employees? Only 50 per cent of the

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respondents report that special provision is made for professional development of the young engineers in their employ, but practically all indicate that their engineering organization provides definite opportunities for professional advancement.

Thirty-seven per cent have formal training programs for young engineers; 65 per cent indicate that jobs are varied to provide a broad training; 41 per cent provide technical programs. within the company; 78 per cent encourage taking courses outside of company hours, and more than half of these contribute to the cost of tuition for such (Some multiple choices are courses. included in the foregoing percentages.)

Mechanical Engineering, April, 1947, p. 306:4.

AMA FALL PERSONNEL CONFERENCE

The Fall Personnel Conference of the American Management Association will be held on Thursday and Friday, October 2-3, at the Hotel Pennsylvania, New York City.

PRODUCTION MANAGEMENT..

How Effective Is Your Production Control?

CEVERAL major gains may be ex-D pected from a well-organized production control setup. Among other things, it should aid in reducing manufacturing costs, provide prompter deliveries to customers, facilitate employstabilization, and relationships between the purchasing department and vendors.*

Mill & Factory recently surveyed the production control programs of a of progressive manufacnumber

turers.* Based on the findings of this study is the following checklist of sound practices, against which you may check your own methods:

- 1. Does top management, in consultation with sales executives, issue a Sales Forecast for a year ahead that Production Control can use as its authority to plan production?
- Is this Sales Forecast maintained current (1) by revisions of the requirements for the quarter immediately ahead according to finished goods inventory and market conditions, and

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^{*} See "Production Control Through Control of Materials," in *Production Series No. 173*, American Management Association, New York, 1947. 56 pages. \$1.00. Available only to AMA members until October 15, 1947.

^{*} See Mill & Factory, May, 1947, p. 87.

(2) by additions of requirement figures for the last quarter?

3. If the product is manufactured as ordered by the customer or according to the customer's specifications and a Sales Forecast is not practical, does top management provide a comprehensive policy that Production Control can use effectively to plan and schedule production?

4. Does Production Control break down the Sales Forecast into requirement quotas for all component parts, combining all common parts into single shop orders to cut down on number of setups or make-readies and to increase the length of runs in the shop?

5. Is Production Control provided with up-to-date bills of materials that specify product model and name; part numbers and descriptions; their arrangement into subassemblies and assemblies; material specifications and requirements for all parts; number of parts required for each model; and whether the parts are to be manufactured or purchased finished?

6. Are current blueprints that clearly indicate dimensional tolerances, finish, heat treatment, and assembly fits provided by the engineering department?

7. Does Production Control prepare a master schedule of material requirements that are based on the Sales Forecast and bills of material as to quantity and type and on the delivery dates as to time when the material is wanted?

8. Is the purchasing department informed of the materials required by material requisitions from the Production Control Department, where the quantities to be requisitioned have been determined by comparing materials needed on the master schedule against

the materials on hand as shown on the inventory records of raw materials, work in process, and finished parts and complete assemblies?

9. Are the inventory records completely trustworthy because they are kept strictly current and because the materials on hand are stored "under lock and key" and issued only by authorized persons according to a system of requisitions?

10. When ordered materials are received from vendors, are they inspected and tested as the specifications require before they are charged into inventories so that they are immediately usable when issued to the shop without rework or extra process?

11. Does Production Control have access to shop routings—operation sequence sheets, operation lists, or whatever they are called in your plant—that give operation sequence; operation description (in sufficient detail to insure that all the work, no more and no less, is performed at the operation); machine or work center by symbol or description; manpower requirements; job classification to be assigned; rate of production; and perishable tools, jigs, and fixtures to be used?

12. Does Production Control prepare a master machine load schedule through which top management can appraise plant capacity in terms of the product required by the Sales Forecast and break any bottlenecks before they snare production?

13. Are shop orders issued only when materials of proper size, type, quality, and quantity can be allocated to them? If substitutions are necessary in present-day shortages, are the substitutions controlled?

14. Are these shop orders released to the shop through dispatch booths,

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or other definite points of control, so that the Production Control Manager can be held responsible for work flowing through the shop?

15. Are specific operational orders, based on the shop routing, issued to the workers according to the master machine load schedule and not according to the foreman's choice?

16. Do these operational orders identify the machine upon which the operation is to be performed, specify the production quota for the operation, and indicate the time that the operation must be finished?

17. When the operation is completed, does the workman turn the operational order in to the dispatch booth so that Production Control maintains control of the work in process?

18. Is quality control in your plant sufficiently stringent to insure that parts sent from operation to operation meet specifications and do not require schedule-disrupting rework?

19. Does a clear channel of communication exist between Production Control and purchasing so that late deliveries are spotted as far ahead as possible and the affected runs rescheduled?

20. Are tools, standard and special, controlled through strategically located tool cribs so that the needed ones are available when the jobs are scheduled in the shop?

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21. Are the perishable tool inventories controlled so that they reflect the need for them according to the work flowing through the shop?

22. Are Production Control and plant layout or plant engineering aware of each other's activities so that any rearrangements of equipment that are necessary are dovetailed into production schedules without disruption?

23. Is Production Control kept informed of the activity of the maintenance crews so that work done on equipment is properly scheduled with regard to production runs?

24. Are finished goods inventory records kept current and the finished goods physically controlled?

25. Does top management realize that Production Control is merely a scorekeeping or statistical department of the manufacturing division and that it is as affective as the data supplied to it from other departments allows it to be?

Disposal of Peacetime Surpluses

A S costs of labor and materials rise, business must become more proficient in obtaining the most value from its many independently small but collectively large indirect expenses. One way to reduce costs is to give careful attention to the disposition of surpluses. Consideration of the surplus disposal

techniques being employed effectively by Caterpillar Tractor Company, Peoria, Ill., may provide ideas of value to other companies faced with a similar problem.

At Caterpillar, all departments concerned are advised of changes in designs or specifications by means of a change notice prepared by the engineering department, specifying the name of part affected, model (or models) of product on which the part is used, descriptive details, date change is to be effective, and disposition of the superseded stock.

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If the change does not need to be effected immediately, the notice usually specifies that present stocks will be exhausted before the new design goes into effect.

If the superseded design for the part is adaptable to the new design by reworking, the notice will so specify. In this type of change, the surplus material constitutes the stock for the new part and is transferred to the new work station designated by the scheduling division. Transfer of reworkable parts or material is arranged as soon as the engineering change notice qualifications as to effective date have been met.

Often, however, parts superseded by engineering changes are not reworkable into the latest design, but still have value to the company as replacement parts for products sold while the old design was in effect, or as reworkable material for other parts. To retain whatever value exists, the data concerning the surplus material is circularized to the various departments which may be able to utilize all or part of the surplus.

When engineering changes do not specify reworking the superseded material into the latest design, it is the responsibility of the scheduling division to advise the stock control section of the date on which the new design becomes effective and the location of the superseded stock. Upon receipt of this notice, the stock control section reviews its files to determine if the superseded stock, in its present form, can be used at some other location or if the stock

can be used to fill replacement parts orders from the parts department. When the material is not believed to be usable in its present form, the stock control section requests the factory material control division to locate the surplus quantities, and to have them transferred to the appropriate salvage station.

Actual movement of the material is done by the interplant transportation division upon the authority of "move" tags attached to the material by the factory material control division.

Upon receiving surplus material or parts, the inspector in charge of the salvage station prepares a list showing the description, part number, status (whether rough, semifinished, or finished), quantity, and reasons for surplus. This list is prepared in duplicate, the original going to the stock control section and the copy being retained at the salvage station.

When lists of surplus materials and parts are received from salvage stations, stock control clerks again compare the items with stock records. If this recheck shows any item reported surplus is a current production item, the stock control section immediately notifies the inspection and scheduling divisions so that the material may be transferred to a production station. If items are shown to be non-current, a "Request to Scrap Surplus Material in the Factory" (hereinafter referred R.S.S.M.) is prepared. This form calls for the following information, to be entered by the stock control section: description; model; part number; factory location of material; surplus quantity in the factory; status; future source of supply; date of issuance; insurer; approval; reasons for scrapping-which may be: (a) non-current material due to discontinued model; (b) non-current or cancelled material that is to be scrapped when new parts become available; (c) non-current or cancelled material that should have been used but was found after new part became effective; (d) excess material due to quantities purchased or manufactured beyond requirements.

When a newly developed part is such an improvement over the existing part that it is desired to put it into effect immediately, the engineering change specifies that all stock, including parts department stock, is to be scrapped. The R.S.S.M. covering these parts is approved by the manager of the stock control section and forwarded to the engineering department. Approval of the parts department is not required in these instances. When the engineering change does not specify that existing replacement parts stocks are to be scrapped, the approved R.S.S.M. and a copy of the blueprint of the part are forwarded to the inventory control manager of the parts department.

In the parts department, information as to service history, available quantities, and dealers' prices are entered on each R.S.S.M. After reviewing the data on this form and other available information, the inventory control manager enters on it the quantity of the surplus part he wishes transferred to parts department stock, and at the same time prepares a transfer order to the parts storeroom. If the parts department takes all the surplus, the R.S.S.M. is returned to the stock control section. If not, the form is forwarded to the engineering department, where-if the surplus material involves considerable stock or high dealers' value-thought is given to adapting the material to other uses. Suggestions for such use are entered on the back of the R.S.S.M., which is then transmitted to the purchasing department.

Each R.S.S.M. received by the purchasing department is reviewed to ascertain if surplus parts or material can be used to fill existing purchase requisitions, and to determine if the material can be sold or traded for more than scrap prices. If the purchasing department arranges for disposition other than scrapping, it prepares the necessary documents to authorize movement of the material. If it agrees that the surplus material should be scrapped, this is indicated on the form, which is then returned to the stock control section.

Upon receiving the R.S.S.M., which has the approval of the parts, engineering, and purchasing departments, the stock control section proceeds to dispose of the surplus material. A representative of the factory material control division is advised of the surplus in the salvage station and is asked to transfer the material to the reclamation division for scrapping. When the factory material control division reports the material has been delivered to the reclamation division, the stock control section completes its entries on the applicable stock records and forwards the R.S.S.M. to the cost accounting division.

Cost accounting division clerks post the applicable unit costs to the R.S.S.M. form, and general accounting division clerks consolidate the information each month in order to charge expense and relieve inventory accounts.

Auditing division personnel is responsible for intermittently checking the various records of R.S.S.M.'s maintained by the stock control section and the general accounting division to determine that proper handling is being

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made for all serial numbers. It is also properly functioning. the responsibility of the auditing division to determine that the internal con- Bulletin, June 1, 1947, p. 1230:9.

given and that accounting has been trols provided by the procedure are

BY ROBERT A. MORGAN. N.A.C.A.

Checklist for Preventive Maintenance

S OME authorities claim that the cost of a maintenance department in an average type of manufacturing plant should not exceed 3 per cent of the company's sales. Does the cost of maintenance in your organization fall below, or exceed, this figure?

Among other things, check your maintenance operations against the following: 1. Is your maintenance department properly organized to handle a preventive maintenance program?

Have you studied the load factors of machines in the plant so as to be able to schedule servicing requirements intelligently?

3. Have you arranged complete servicing schedules for all the machines and equipment?

4. In addition to the usual lubrication and cleaning service for equipment, do you also have the performance of the equipment checked periodically so as to anticipate wear or other indications of failure?

5. Do you keep complete card records of each piece of equipment, showing when last serviced?

6. Do you lay out in advance daily schedules for the equipment to be serviced and the men detailed to do the job?

7. Are your schedules of routine servicing so arranged that there is no chance of hidden or out-of-way equipment being overlooked?

8. Are you able to anticipate most major breakdowns in advance, so that machines can be torn down and repaired when they are not scheduled for

production operations?
9. Is your stock of spare parts and repair materials intelligently planned so that you are prepared for any likely contingency without requiring an excessive inventory?

10. Have you endeavored to standardize on supplementary equipment, such as motors, controls, pulleys, belting, heaters, valves, etc., so as to minimize your stock inventory?

11. Are you thoroughly acquainted with the stocks of your local industrial distributors, so that you can call on them for emergency parts as well as for your normal requirements?

12. Do you have outside contractors handle jobs which are not economically

practical for you to handle—such as rewinding large motors?

13. Is your department organized to handle emergency repairs quickly and efficiently?

14. Are there sufficient skills among your maintenance men to handle any type of repair job that is likely to occur? -Mill & Factory 5/47

Prices of Industrial Equipment

BASED on official government figures, the prices of industrial equipment increased only 28 per cent between 1030 and March 1047 relationships creased only 28 per cent between 1939 and March, 1947, the Machinery and Allied Products Institute reports. Over the same period, the wholesale prices of all commodities, of raw materials, and of manufactured products increased 94 per cent, 133 per cent, and 79 per cent, respectively. Profits of machinery manufacturers have declined substantially, the Institute declares, and since 1939 the equipment industry has absorbed increases of 70 per cent in average hourly wage rates and of 40-50 per cent in costs of purchased materials.

MARKETING MANAGEMENT...

Marketing Research in American Industry

PPROXIMATELY 38 per cent of A the 4.786 companies responding to a questionnaire survey, conducted by the Committee on Marketing Research Activities of the American Marketing Association in collaboration with the Distribution Committee of the National Association of Manufacturers, reported doing marketing research of some kind, either through an organized department or through a line executive. Size seems to be the determining factor in establishment of a marketing research department. Relatively few companies with sales under \$2,500,000 use established departments for performing research functions.

The channels of distribution used by respondent companies have a bearing on the scope of marketing research functions. Where the chain of distribution is relatively direct, fewer comfunctions. performed these Where there were intermediate steps in the distributive operation, the tendency to control and direct distributors through the functions of marketing research appeared stronger. This may indicate that those firms which sell directly may feel their direct contact with the final purchaser obviates the need for marketing research. This assumption is dangerous, for it means these companies are relying upon their sales forces for the reporting of marketing research data, and experience has demonstrated repeatedly that salesmen are seldom able to report facts objectively.

The company's product may be

an important factor in determining whether a marketing research department has been organized and also whether any marketing research functions are being performed. Most frequent use of marketing research is indicated in the food industry—74.5 per cent; petroleum and coal, 72.2 per cent; iron and steel, 68.0 per cent; electrical machinery, 55.5 per cent; and printing and publishing, 50.4 per cent. Marketing research is used less by members of the apparel, lumber, and rubber industries, in which less than 25 per cent of the respondents reported its use.

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For the purpose of the survey, marketing research functions listed on the questionnaire were limited to 16 that were considered most common. It was found that in the firms which had organized research departments, an average of 10.7 of the functions were performed, while only 6.8 of the functions were performed in companies where marketing research was a line executive function. Consumer goods companies perform slightly more of the functions listed than do industrial goods companies. The average is 10.7 functions for the former and 9.9 for the latter. where marketing research departments have been organized; and 6.9 and 6.3 functions respectively for companies where the research is done by a line executive. Forecasting sales and determining sales potentials are the two most frequently checked functions among both consumer goods and industrial goods companies having research departments. Companies seem to be more interested in their sales and advertising results than in the best means of attaining those results or of improving them.

The marketing research department was found, in nearly half the cases studied, to have full responsibility for figuring sales potentials and conducting consumer surveys. In nearly half, also, they had partial responsibility for studies of distribution methods, determining new uses for old products, and making studies of demand. Probably more significant are the percentages of marketing research departments that are indicated to have no responsibility for many of the functions normally considered as marketing research activities. Leading the list are the conducting of price studies, in which 26.6 per cent of the departments have no responsibility, followed by testing package design (24.1 per cent), economic analysis of business and industry (23.4 per cent). and setting standards for distributors and retailers (22.7 per cent). This suggests that the reluctance of operating departments to allow marketing research personnel to share their problems is preventing many companies from getting full value for their marketing research dollar.

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In 59.7 per cent of the companies that have organized marketing research departments, no indication is given that the firm has developed standards for distributors and retailers. In 56 per cent of the cases, there is no evidence that package design is tested. Nearly half—45.5 per cent—seem not to be worried about the preference of consumers. Likewise, the determination of consumer and dealer preference for products is being overlooked in over 40 per cent of the companies.

Respondent companies showed little uniformity in their selections of the outstanding research jobs they had done. Only three types of job stand out to any degree—each representing about 10 per cent of the total mentions: (1) studies of market potentials; (2) development or improvement of products; (3) studies of product demand. Projects related to product development seem to have been equally valuable to both consumer and industrial companies.

A significant commentary on the recency of acceptance of marketing research as a business tool can be found in the fact that another 10 per cent segment of companies stated that the operation was too new with them to make it possible to answer this question.

Marketing research activities are considered of sufficient importance in nearly half the companies to engage the attention of the top management group. Where the marketing research activity has been recognized sufficiently for it to become a separate department, the interest of top management is even more pronounced, for 78 per cent of such marketing research department heads report to top management executives. There appears to be no significant difference between industrial goods companies and consumer goods companies in this respect.

In about one-half the companies having marketing research departments, these departments participate directly in the determination of company policy. Marketing research departments vary greatly in size, but the large bulk have less than five employees.

By W. W. HEUSNER, C. M. DOOLEY, G. A. HUGHES, and P. WHITE. *The Journal of Marketing*, April, 1947, p. 338:17.

Salesmen's Expense Allowances in Metropolitan Areas

F 70 companies surveyed by Dartnell, approximately half make some adjustment in salary or expense accounting for salesmen whose territories are limited to a metropolitan area. Methods used vary widely; some companies make salary adjustments, some differentiate in the type of expenses allowed, and a number make a different type of automobile expense allowance to metropolitan area men.

The solutions arrived at by individual companies vary because of differences in basic thinking on the part of sales management regarding expenses. If the company takes partial responsibility for the depreciation of the salesman's car, for instance, the automobile allowance for a man traveling exclusively in cities is usually higher than in rural territories because his fixed costs per mile are higher.

Differences in Salary.-About 10 per cent of the companies surveyed indicated they make a distinction in salary level between country and city A representative of the salesmen. Richardson Corporation commented:

We generally schedule salaries at a little higher rate for the metropolitan areas than for other territories. While we make no differential for type of expenses paid, it is quite evident that traveling expenses and many other types of expenses are less in the metropolitan area, which balances cost of sales even though we do allow higher salary rates because of higher costs of living.

Lusk Equipment and Supply Company uses an entirely different compensation plan for its metropolitan area representatives. A member of the management said:

This is a problem we are currently considering. Our present setup is for salary and car expense to city salesmen; country salesmen are paid on commission with no

expense allowance, the commission being based on a percentage of profit high enough to compensate for expenses.

The companies which allow a salary differential ordinarily treat the expense accounts of all salesmen in the same way.

Differences in Expense Allowances. -Approximately one-third of the reporting companies make a distinction of some sort in expense accounts for metropolitan and rural salesmen. There is, however, no general agreement as to whether this adjustment should be up or down; one sales executive said that analysis of expense accounts indicated that men in rural territories needed about 20 per cent more than city men to cover expenses, while the representative of another firm was of the opinion that it costs more to operate in a metropolitan market.

Actually, out-of-pocket expenses for metropolitan salesmen are undoubtedly lower, as auto mileage is less, many meals are taken at home, and hotel bills are not part of the problem. At the same time, higher living costs in cities and the higher depreciation per mile on cars will in the long run boost the metropolitan man's expenses in ways that do not show up on an expense account. Recognition of these facts is behind such systems as that reported by the Independent Lock Company:

We give the men in metropolitan territories a flat daily allowance intended to cover ordinary traveling expenses within the city, noonday meal, and an occasional lunch or entertainment for customers. Men who operate outside of metropolitan territories are on actual expense allow-

Auto Expense Allowances.—In a number of cases, the adjustment for exp surv The outrate

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the city salesman takes the form of an extra auto allowance. The Inland Container Corporation pays city men an extra \$15 a month to cover parking expense; other firms included in the survey also pay a bonus of this type. The Patterson Sargent Company pays out-of-town salesmen by a mileage rate and city salesmen \$60 a month.

The increasing popularity of systems under which the company pays a flat sum to cover standstill expenses, plus

a low mileage rate, indicates a general attempt to adjust for the metropolitan area problem. Typical of these arrangements is the one used by the Perfex Company, which pays for gasoline, oil, and incidental auto expenses and adds a payment of \$8 a week to cover depreciation and major repairs.

From Expense Allowances for Salesmen in Metropolitan Areas. The Dartnell Corporation, Chicago, 1947.

4 pages.

Bureau for Buying

THE TREASURY Department's flourishing Bureau of Federal Supply expects a turnover of \$150 million worth of Federal "housewares" this year, regardless of what happens to the business index. And it's counting on a moderate markup

on most of the goods it sells.

The B.F.S., formerly known as the Treasury's Procurement Division, is responsible for buying, storing, and distributing supplies needed to keep all the federal executive departments in running order. Twelve huge warehouses, spotted around the country from Boston to Seattle, and Chicago to Atlanta, are stocked

with everything from baby bottles and armchairs to paper clips and carbon paper.

Like any department store, B.F.S. adds a retail markup to the merchandise it "sells" to Uncle Sam's agencies, to cover the cost of inspection and handling.

Generally, this markup is 12 per cent of the purchase price.

More than a half million American business firms are on the Bureau's list of potential suppliers. Any company in the country can get on this list simply by asking B.F.S. to jot down its name. Then the agency will send along a questionnaire, detailing the commodity groups it buys, and the manufacturer can check the items he can furnish.

B.F.S. uses three methods when it goes marketing for its myriad supplies:
(1) general schedules, (2) "open market" purchasing, and (3) "consolidated"

purchasing.

No single warehouse in the country would be big enough to stock all the goods Uncle Sam uses in a typical year, but B.F.S. must know where to get them when they're needed. So it has a shelf of booklets or catalogs labeled "general schedule of supplies," in which 105 different classes of commodities are tabulated.

These are, in effect, mail order catalogs which list the items available, their prices, length of time needed for delivery, and the names and addresses of the

makers.

-A. K. ESTILL in The Wall Street Journal 3/20/47

[•]WHAT PERCENTAGE of sales receipts should be spent in advertising? There is no standard figure, even in the same industry. Drug producers as a group spend more money for advertising than any other classification: approximately 30 per cent of the net sales volume of this industry, on the average, is turned back into advertising. The next largest advertiser is the soft beverage industry, which spends more than 15 per cent of sales for advertising. Smallest advertisers are auto truck manufacturers (1.27 per cent of net sales). While these figures are prewar, they are probably more pertinent than 1946 figures, which would be distorted by shortages and other factors.

FINANCIAL MANAGEMENT...

What the Public Thinks About Financial Statements

IF ACCOUNTING is the language of business, and the accountant is the interpreter of business to the public, then accountants might as well be talking in Sanskrit so far as any effective communication between business and the public is concerned. This disturbing conclusion is drawn from a survey just made for the Controllership Foundation by the Opinion Research Corporation.

Why? For two reasons, principally:
(1) Most of the public either does not see, or does not understand, information prepared by accountants; and (2) such information as it does see, it doesn't believe.

Take profits, for instance. Profits is the public's word for money taken out of a business by owners or managers, the public isn't quite sure which. Often it is regarded as the amount of money wrung from the pockets of underpaid workers. Half the people in America can think of one or more companies that they think are making too much money. One-third think business in general is "making too much profit." Here is what Americans think business makes:

45 per cent think business makes 25 per cent or more profit.

cent or more profit.
25 per cent think business makes 10 to
25 per cent profit.

The average opinion of all Americans is that business makes 25 per cent profit.

Financial statements, in themselves, apparently are not a very effective medium for getting information to the public. Only a third of the adult popu-

lation (36 per cent) has ever seen a profit-and-loss statement; and, of those who have, nearly half have seen only statements of banks and insurance companies. Interest in financial statements is not keen, for of the 36 per cent who have seen a financial statement only a third have seen one in the last six months.

The conclusion is justifiable that financial statements themselves are a comparatively unimportant source of information to the average person. This is not to say, of course, that information in financial statements is not transmitted through hearsay, financial services, and the public press.

How much confidence has the public in the honesty of industry's statements? Not much. More people think companies lie about their profits (45 per cent) than believe that they tell the truth (41 per cent). Fourteen per cent had no opinion. Why does this group think companies lie about their profits? These are the principal reasons, among others:

a. to keep profits from the public (14 per cent)

b. to reduce taxes (14 per cent)
c. just won't tell the truth (12 per cent)
d. they hide profits in expenses (11 per

cent).

Public suspicion of business is borne out by its conviction that business has "hidden profits." A little over half the people had heard the term; a third of those who had heard the term thought business "had a lot of hidden profits." A revealing attitude is shown by the 20 per cent who had never heard the term,

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but, who, on having it mentioned to them, concluded that business did indeed have hidden profits.

Altogether a little more than onethird of the people believe companies have hidden profits. Their reasons are:

- a. income-tax evasion (16 per cent) b. to make money (15 per cent)

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c. to hide profits from the public (14 per cent).

From this survey, it appears that about half the American public doesn't believe the figures given out by indus-This fact is more directly attrv. tributable to management and public relations practitioners than to accountants. The accountant has, however, a great stake in the public's understanding of business figures. One of the responsibilities of the accountant is to protect the public's interest in financial statements, and the accounting profession must help management to present widely understood, and believed, financial information.

Here is what the public has to say about the way statements are prepared: More than half the adult population (56 per cent) thinks companies make their statements hard to understand, use too many big words. Less than a quarter thinks statements are easy to understand.

Words have a great deal to do with Interviewers asked respondents what was meant by some of the common accounting terms. These were the results:

When asked what is:

- a. "Earned surplus," 45 per cent didn't know; of those who professed to know, less than a sixth give the same answer;
- b. "liability," 22 per cent didn't know; c. "assets," 21 per cent didn't know; d. "reserve for contingencies," 41 per
- cent didn't know;
 "accrued taxes," 48 per cent didn't know.

This should be a good object lesson for those who write company reports.

The survey establishes that many people do not get financial information on business through usual sources (reports, newspapers, financial services) but that they do get some kind of information, and that they don't believe what information they get. The way in which they do get their information is interesting, and it may shed some light on the lack of confidence in it. For example, when asked "Are there any companies or industries that make too much profit?", half said yes. They gave these reasons for believing this profit was too much:

- a. the prices they charge (39 per cent); b. reading, conversation, neighbors (23
- per cent) c. they pay their employees so little (7
- per cent); d. high executive salaries (5 per cent); e. it doesn't cost much to make their
- products (4 per cent). Of the people who thought some company or companies made too much

profit, over half had never read anything about that company or companies.

The report concludes with ". . . some of the possible approaches to the problem that should be given careful thought. . . .

- "1. Believability. What can be done by controllers to cause the public to accept company reports as true statements of corporate officers?
- Understandability
 - "a. Can a more effective set of terms and symbols be developed which will facilitate understanding?
 - "b. Can financial statements be simplified and dramatized so the facts will go across with greater ease?

- "c. What can be done in financial reporting to explain the workings of the profit system—i.e., the mechanics of attracting capital, the relations between capital investment and high real wages, etc.?
- "3. Communicability. Given the facts, what can be done to push them across the threshold of public consciousness—for example:

- "a. What role can employee reports play?
- "b. Are community meetings a good device to communicate financial facts?
- "c. What is the reportorial function of institutional advertising in respect to financial reporting?"

The Journal of Accountancy, June 1947, p. 487:3.

Corporate Undistributed Income on Spot

AN ENACTMENT of American tax law is no longer a precise blueprint for the taxpayer's action; it's more like a photographic negative, still to be exposed to individual cases and developed into practical law by the Internal Revenue Commissioner and the Tax Court. This accounts for the consternation that seized corporate taxpayers when their 1946 returns blossomed with a request for listing the percentage of earnings distributed to stockholders during the year.

Section 102 of the Internal Revenue Code places a special tax on the undistributed net income of every corporation except personal holding companies, in cases where the corporation is formed or used to prevent imposition of surtaxes on the personal incomes of stockholders. The rate at which suspicion begins to accrue has been set at 70 per cent distribution of the total net.

That much is known. Whether the Commissioner and the Court intend to wait until they spy injustice, or indiscriminately to blaze away at enrichment, can be learned only by observation of what they do in particular cases. The stake is considerable for a large taxpayer or stockholder: 20 per cent of the first \$100,000 of undistributed income as defined by the statute and 38½ per cent of any larger sum.

No legal presumption is raised by the 70 per cent figure. If, in fact, 75 per cent of earnings has been distributed, but the remainder retained for the purpose of avoiding personal surtax to shareholders, the statute has been violated. The reverse situation is also true. However, failure to distribute 70 per cent of earnings brings a corporation face to face with the task of persuading the revenue authorities that earnings were properly retained.

Distribution of less than 70 per cent of earnings is not the only signal which may put the Revenue Bureau on the trail. If a corporation invests earnings in securities or other properties unrelated to its normal business activities, it may indicate that the corporation has unreasonably accumulated surplus. Advancing loans to officers or stockholders

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is often fatal, indicating that the company has more of a surplus than it needs and may be paying dividends, or salaries, in a form intended to lower the recipient's personal income tax. Individual proprietors or partnerships which have recently incorporated may be suspect, since the revenue authorities may regard the transformation as an attempt to accumulate earnings improperly.

A corporation which has distributed 70 per cent of its earnings may be investigated if it is believed the firm could have distributed more because of its financial position or the nature

of its business.

Neither the statute nor the Treasury regulations are enlightening on what constitutes an "unreasonable" accumulation of surplus. Court decisions, however, offer the semblance of a guide.

In a fairly recent Tax Court decision, a taxpayer set up a "reserve for new building" because his lease provided that he could be dispossessed on six months' notice unless he purchased the property. Accumulation of earnings in that case were held to be proper. (An added fact in the case was that the nature of the corporation's business required large cash reserves.) It is probable, however, that accumulation of earnings to meet possible emergencies in the indefinite future will be considered unreasonable.

If a company is engaged in an expanding business with a legitimate need for additional capital, accumulation is permissible. Accumulation is also permissible for application toward reduction of debt.

Preservation of all minutes of meetings, records, and correspondence relating to plans which a corporation will rely on to prove its case for retention of earnings becomes a more than normal safeguard. Companies are advised to compare their ratio of current assets to current liabilities, working capital to sales, and cash to inventories, with the ratios of competitors in the same field of business. If such items do not compare favorably, it is a sound argument in support of the contention that earnings are retained to enhance the corporation's competitive and credit positions. Plans to use capital for a certain purpose and retain earnings will place a company in an unfavorable light if such plans are subsequently abandoned.

At the present time, many corporations in various lines of business are setting up reserves for possible inventory depreciation. Most economists expect price recession in certain goods and commodities. The President has publicly appealed for general price cuts. It seems proper, therefore, to accumulate earnings to the extent of setting up such a reserve, come what may. If prosperity is ahead, great demands will be made on capital to finance a new era of expansion. If depression is in the cards, capital should be preserved to assist a corporation in weathering the economic storm. Retention of earnings to set up a reserve for contingencies of this nature thus seems a proper accumulation of earnings.

When answering this "\$64 question" on its tax return, a corporation should furnish a complete statement setting forth all the reasons underlying the retention of earnings. It is possible that in the future, when arguing the case, the corporation may be limited to the reasons set forth in that statement.

By James P. Reeves. *Barron's*, June 16, 1947, p. 9:1.

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INSURANCE...

Current Pension Problems By M. B. FOLSOM

Treasurer Eastman Kodak Company

IN RECENT years, a great many industrial and commercial concerns have adopted retirement plans. In part, this results from the fact that companies are naturally growing older and more workers are reaching retirement age. It is also accounted for by the fact that management is now giving greater attention to all industrial relations problems and the benefits of pension plans are being more fully realized.

The prime purpose of a retirement plan, of course, is to provide financial assistance to employees when they cease active work. If an employee has had a long period of service, management naturally hesitates to release him if it knows he will have to take a sharp reduction in living standards. Without a pension plan, the employer will probably keep such a worker on the force, at least for a few years. As a result, there is a pension cost which is not recognized as such but is buried among other costs. In actual practice, a direct payroll saving offsets substantially the current cost of a pension plan.

The indirect benefits to the company are greater than this direct saving. Retirements open up new opportunities all along the line; in the case of retirement of an executive or supervisor, promotion can often be given to several persons. The organization can thus be maintained on a more efficient basis. An adequate pension plan also stimulates the morale of the organization—both younger and older workers can look forward to retirement age with less worry about economic security. A pension plan also enhances the prestige of the employer in the community and attracts more satisfactory employees even in the younger ages. As a matter of fact, because of the great increase in pension plans, lack of a plan is now a handicap to many companies in hiring.

In the long run, the advantages of a pension program and other benefit plans should be reflected in continuity of employment and long service by a high percentage of workers. With the experience that most companies have had with high labor turnover during the war and postwar period to date, there is better appreciation of the gain in productivity and reduced costs which result from low turnover and steady continuous employment for a large proportion of employees. A pension plan alone will by no means bring about low turnover, but it is an important factor.

These are some of the reasons why business concerns which have had several years' experience with adequate pension plans believe they are good business investments. Advantages to the worker are obvious. At the same provemini to sa that ment pany

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time, pension plans do not generally provide high enough annuities to diminish the incenitve of the individual to save during his working lifetime so that he can supplement retirement payments that he receives from the company and Social Security.

The many companies which have pension plans in operation are now fac-

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Employees working after their normal retirement age.

The principal purpose of a pension plan-i.e., retirement with income of those who reach retirement age and the consequent benefits to the company and to the individuals-cannot be fully achieved unless the persons actually retire. During and since the war, because of the manpower situation, many companies have become less strict in enforcing retirement and, as a result, many workers stayed on beyond normal retirement age. While this might be satisfactory as a temporary measure, if continued very long it would undoubtedly affect the efficiency and morale of the organization and would certainly defeat the prime purpose of a pension plan.

A possible solution to the problem is to make retirement compulsory at the normal retirement age (age 65). If retirement is to be compulsory, however, it should be compulsory for all employees, for the president as well as for the window-washer. Exceptions to the rule make for discrimination and may create additional personnel problems. Under a compulsory retirement plan, a well-arranged program should be initiated to see that properly trained replacements are available. Also, adequate notice should be given to the employees so that they can make plans

for their retirement. Companies which have adopted compulsory retirement rules sometimes find that they want to retain certain key men after retirement. In certain cases, the compulsory rule has been circumvented by retiring an employee and then rehiring him in a consulting capacity, but this practice should be followed only in exceptional cases.

If a compulsory plan is deemed undesirable, then a program can be formulated to educate the employee on the advantages of retirement so that he will want to retire at age 65 and enjoy the rest of his life pursuing the hobbies that interest him. Employees will be especially interested if the program is presented through personal contact and they realize that the company wants to help them plan their retirement. The industrial relations department can arrange to have talks with the employees, starting about five years before their normal retirement date or even earlier, to discuss their plans for retirement. The employee should be informed of the amount of his pension and Social Security benefits and other benefits which may be available to him. It is the older worker who must be educated on retirement—the younger worker thinks in terms of retirement at ages under 65.

If an employee works after his normal retirement age, he naturally continues to receive full wages, and in most plans the annuity payments commence only upon actual retirement, which is a logical policy. Some pension plans operated in conjunction with group life insurance programs provide for the continuation of life insurance after retirement on a reducing basis until a certain minimum is reached. This principle of reducing the life in-

surance might possibly be applied as well to those employees who continue to work beyond normal retirement age. Without such an arrangement, some persons probably would want to continue to work after 65 in order to keep their life insurance in full force. In other words, all employees over age 65 would be treated alike regardless of whether or not they retire.

2. Retirement of women at age 60.

As long as the Social Security law provides for retirement age of women at 65, companies with retirement age of 60 for women will probably want to let many female employees continue working until age 65. Since the Social Security law may be amended to provide for retirement at age 60, management is reluctant to modify plans to provide for retirement at 65.

If women retire at 60, their Social Security benefits at age 65 will be somewhat reduced because of lower average monthly earnings as a result of loss of earnings between ages 60-65.

In case of retirement before age 65, it might be desirable for management to make certain additional interim payments to compensate partially or wholly for the Social Security benefits which the employee would receive at 65.

3. Employment of older workers during the war years.

Because many older persons were hired during the war, companies now find among their staffs a larger number who will have had a comparatively short period of service when they reach the normal retirement age—service not long enough to provide adequate pensions. Unless some way is found to retire these employees at 65, the principal purpose of the pension plan will be defeated.

It doesn't seem reasonable to expect industry to make pension provisions for employees of less than five years' service at age 65.

For employees with 5-10 years of service at 65, the pensions provided by the majority of plans would be so small that it would be embarrassing in most cases to pay them. Instead of a pension, a dismissal wage based on years of service could be paid. This lumpsum payment would probably mean more to the employee than a very small monthly pension check. In other words, no provision would be made to include in a pension plan employees who were hired after age 55. The balance of the workers with more than 10 years' service would receive the annuities accumulated at age 65.

4. Amount of monthly pension in relation to final salary.

In those plans under which benefits are based upon wages received during the worker's lifetime, the pensions for those now retiring do not represent nearly so high a percentage of the final salaries as was the case a few years This, of course, is due to the sharp rise in earnings during the last few years. A general upward revision of benefits would involve heavy additional costs. If the benefit formula has been on the low side, it would be desirable to increase it; but if in the past it has produced a reasonable pension, it would be hazardous to make a general upward revision until we can foresee more clearly what the situation will be in the next few years. For the time being, perhaps, it would be sufficient to raise the minimum pension in those plans which do provide minima. Since a large proportion of pension plans, both contributory and non-contributory, min tion be g mur min taki pan The enti

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make no provisions for minimum pensions, it may be desirable to establish minima in view of present-day conditions. Consideration should probably be given to the establishment of a minimum monthly pension in relation to a minimum percentage of the final salary, taking into account the combined company and Social Security payments. The company would, of course, pay the entire cost of providing the additional annuity needed to meet the minimum.

These problems of lower benefits are not encountered in plans under which the annuity is based on final salary. On the other hand, concerns with the latter type of plans are probably now facing a more difficult financing problem because their pensions are much higher than previously estimated.

Increased life insurance coverage after retirement.

In companies where the life insurance plan is operated in conjunction with the annuity plan, provision is sometimes made for a minimum amount of life insurance coverage after retirement. In some of the older plans this minimum was \$500. There are several reasons why the minimum amount of life insurance in many plans should possibly be increased.

There is increasing realization that under present conditions employees have limited capacity to accumulate a sizable estate, even though they may have been paid high wages during their recent working years. In some cases, their group life insurance is the only insurance that the retired employees have.

In some of the older plans, all em-

ployees were treated alike after retirement—i.e., a minimum of \$500 applied to all, regardless of length of service and earnings prior to retirement. Such a method discriminates against employees of longer service.

One solution is to base life insurance after retirement on the annual annuity: including a minimum so that adequate life insurance would be provided in all cases. Another possibility is a provision which would base the insurance on a percentage of the amount in effect at normal retirement age, which percentage might vary with length of ser-Such liberalizations will, course, increase the cost of the group life insurance plan, and some firms may believe it more desirable to expend the additional money on increased benefits for active employees instead of increasing life insurance benefits after retirement.

During the last few years, many existing pension plans have been revised and brought up-to-date. question arises as to how often a plan should be reviewed and, perhaps, modi-This, of course, depends upon changing economic and industrial relations conditions. During the present period, it would probably be well for the corporation officials, with the aid of qualified advisers, to review benefit plans every year or two. In normal times, a review might be necessary every four or five years. If a pension plan is to be fully successful, it is essential that those executives charged with the administration of benefit plans keep up to date on current problems so that their plans can be amended as required.

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CONSUMER CREDIT in the United States, including charge accounts, is now near a \$10 billion peak, according to McFadden Publications Research Department.

—The Advertiser's Digest 6/47

Story of a Buyer

THE insurance buyer's job is to protect his organization from known and unknown hazards at the lowest price commensurate with sound protection. This is the story of how these objectives are being achieved for the company with which the writer is associated.

As the first step in dealing with our insurance problem, a survey was made of the hazards of the business, after which a complete schedule of all types of insurance to be carried was approved by management. As an aid to our thinking, we have found it advisable to maintain from year to year detailed and complete records of all losses applying to each plant and department. These statistics play a big part in our program. They tell us what has happened and provide a guide as to what may happen.

Let us assume it has been decided to construct an addition to one of the company's factories. At the time the decision is reached, the insurance buyer is notified and told the approximate amount of money involved. It is then the insurance department's responsibility to follow up with the engineering division and to review blueprints of the contemplated work. Following that, we obtain insurance companies' approval of our proposed plans and arrange for insurance. As the work progresses, necessary contacts maintained between our buying department, the engineering division, the contractors doing the work, and the insurance companies, to see that insurance protection is continued and insurance company requirements satisfied.

We find it necessary to visit and inspect our risks frequently. For this

purpose, experienced engineers from our home office visit the plants and become familiar with them. Let's follow through one of these inspection trips:

Let's say the engineer visits four or five different plants. At each plant, he meets its superintendent and discusses problems with him and then makes a detailed inspection with the plant fire The same things protection man. checked and inspected by an insurance company inspector are reviewed by our man, and, in addition, other insurance matters are discussed with the local organization. Defects revealed by the inspection are reported to the local superintendent. Following the engineer's return to the home office, a detailed report is written up, covering the inspection at each plant and including recommendations for elimination of defects. These reports, supplemented by the insurance manager's comments and recommendations, go to management, and efforts are made to eliminate the defects which have not yet been cor-Where difference of opinion exists between our man and the local plant management, the matter is talked out in open meeting, and a decision agreeable to everyone is reached.

In the final analysis, there are three divisions to the insurance buyer's work: (1) placing insurance; (2) loss prevention; and (3) collection of losses. Each one of these is dependent on the other two. For example, in placing insurance we want to buy at lowest cost possible. To get the cost down means our losses must be low. To keep losses low, we must work on loss prevention. To collect losses, we must have good insurance, and a good loss record is an aid in obtaining good in-

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All claims against the company for losses covered by insurance, regardless of where the loss or accident may have occurred, clear through the insurance department of our home office. If, for instance, there is an automobile accident involving one of our salesmen and the salesman is able to report, he does so immediately. Where disability may prevent the salesman from reporting. word quickly reaches us. The office or district in which he is employed has given him instructions on what to do in event of an accident. Copy of the report comes to us, and, if the accident involves injury to persons or property, it is handled by an insurance company. Before settlements are made for personal injuries or property damage, we are given opportunity to consider and veto them if we do not approve. Similarly, if we want a case settled, we say so. If we become involved in a suit. we cooperate with the insurance company and make necessary arrangements to produce witnesses when needed.

When a property loss occurs at one of our factories or warehouses, we are advised by telegram if the loss exceeds \$100. If insurance is carried, we report

the incident to the insurance companies, and adjustments of all claims are handled in the home office.

We have tried to simplify our general insurance setup as much as possible. Whereas in the past we had as many as 50 insurance policies for a plant, today we may have one or two fire insurance policies and but a few policies covering other hazards. This means simplification of records as well as a saving in time. In addition, we endeavor as far as possible to secure one contract that automatically covers whatever risks may be involved.

The insurance buyer should give the agent all the information necessary to enable him to understand the company's problems. At the same time, the buyer should make sure that the agent gives adequate attention to the firm's account, that he justifies his commission, that he treats as confidential his extensive knowledge of the company's business, that he is in a position to show why whatever proposals he makes will help the company, that he has a well-thought-out plan ready for consideration.

By Lowe H. Wiggers. The Casualty & Surety Journal, April, 1947, p. 5:8.

Trend Toward Contributory Retirement Plans

A nalysis of 100 important retirement plans adopted during 1944 and 1945 reveals that 48, or almost half, required contributions, while between 1936-43 it has been estimated that 85 per cent of the plans were contributory. Advocates of non-contributory plans (which flourished during the war) contended that adoption of contributory plans would result in a great many eligible employees not participating, but experience seems to indicate otherwise.

There appears to be a definite trend at the present time toward the adoption of contributory plans. Among the specific reasons are the following:

- Wages are higher, withholdings are less and should decrease even more.
 Corporate taxes now do not exceed 38 per cent, as against a wartime high of 95 per cent.
- 3. Companies are looking ahead to more normal earnings and possible recessions.

-Fred P. McKenzie in The Journal of Commerce 6/16/47

Survey of Books for Executives

Concept of the Corporation. By Peter Drucker. The John Day Company, New York, 1946. 297 pages. \$3.00.

Reviewed by C. W. Moore*

Big Business, according to Peter Drucker, is collectivism—American style. Though much older than its Russian equivalent, it is still immature; it is confused in its structure, contradictory in the divergence between policy and practice, and almost wholly ineffective as a coherent social unit. Nevertheless, the large corporation is our best hope for the future. In the mechanics of production and distribution, American corporate enterprise holds the all-time record, and is still improving. As a source of enonomic stability, social strength, and psychological satisfaction, the corporation is notoriously weak, but Mr. Drucker explains why it is weak and how it can be strengthened. He applies a broad knowledge of modern social science to his intimate experience with corporations as a management consultant, and he points the moral of his tale with much evidence from his 18 months' study of General Motors.

The analysis covers a wide range of specific issues that are critical in the management of a corporation, but the general plan of the book is simple. It deals with the three main aspects of the fundamental problem of human relations in business,

namely:

1. How business executives get along with each other.
The attitude of foremen and workers

toward the corporation.

3. The corporation's responsibility to the community and the nation for eco-nomic stability and security.

Relations Among Executives

The junior executive laying plans for his career and the senior officer faced with new or enlarged responsibilities will be especially interested in the treatment of relations among executives, i.e., in corporate organization and management methods. Two types of line organization are presented: centralized management, for situations where policies are clearly formulated and divisional responsibilities are largely routine; and decentralized management, where each divi-

sion of the corporation operates as a comparatively independent enterprise, governed only by general precept and counsel from the central office. Emphasis is placed on the fact that no actual situation falls entirely in one class or the other; and no one kind of organization is used exclusively in the typical corporation. Actual practice, as followed at General Motors, varies not only with the business of the several divisions but also according to personalities. Each executive is allowed some latitude in selecting the methods suited to his taste and abilities. It would be folly to force a uniform pattern of organization on a hetero-

geneous group of executives.

Relations with the heads of enterprises, both suppliers and distributors, present a somewhat different problem. The desire for short-term profits brings the corporation into conflict with the smaller business units that feed in raw materials or take away its product. Here, as in almost every phase of human relations, the opportunist makes his gains through temporary competitive advantage, while the statesman in business or politics draws his profit from long-term cooperation. Mr. Drucker illustrates this thesis by describing in detail the natural conflict between General Motors and its distributors, and the manner in which that conflict has been resolved.

Attitude of Foremen and Workers

About 20 years ago, experiments conducted by Elton Mayo and his colleagues at Western Electric's Hawthorne Plant gave new insight into the mental processes of workers. The full import of these tests, as amplified during the succeeding years, is that most people—business executives excepted—are not governed in their actions by economic logic; in fact, their major objectives are not economic, and their mental processes are not logical. This is the great gulf between management and labor.

To bridge this gulf and deal effectively with employees, executives must meet them on their own intellectual grounds. They cannot be swayed by the simple logic of the balance sheet and the operating statement, for their problems are different and too complicated for such treatment. Their problems must be considered in the light of the workers' social and psychological objectives, and solutions must be evolved by their

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CYCLES E. F Holt page

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^{*} Assistant Vice President, SKF Industries, Inc.

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Seventy pages of Concept of the Corporation are devoted to the practical applications of these fundamental principles to relations with foremen and workers. The presentation of this elusive subject is simple and direct; more than that, it is forceful and convincing. I know no better pocket guide to labor-management cooperation than these 70 pages.

The Corporation and Economic Stability

Mr. Drucker implies that it is quite within the bounds of possibility that the privately owned corporation will pass from the American scene before its operation is well understood or its potentialities fully developed. The corporation is on trial at the bar of public opinion for failure to fulfill its social obligations, and the trial to date is going badly for the defendant. Five years of full employment, at peak wages, has set a standard of economic performance that we cannot hope to maintain unless new standards of statesmanship are adopted in both business and government circles. As the author states it: "If the free-enterprise system fails to maintain full employment, it will not survive, whatever its other advantages."

The concluding section of the book deals with the conditions under which corporations can maintain full employment without sacrificing productive efficiency or financial strength. In this part of the analysis the author combines the surrealist sketches of the various schools of economic theory into a single picture which is as simple and comprehensive as an engineer's blueprint.

The treatment falls short of the academic standards of economic exposition—there are no statistics, graphs, or equations—but it is more than adequate as a bench mark for business policy or political campaigning. Its coldly objective appraisals, its depth of perspective, and its well-balanced emphasis, all give promise of the emergence of an engineering branch of economic science, for which we have an immediate and urgent need.

Cycles: The Science of Prediction. By E. R. Dewey and E. F. Dakin. Henry Holt & Company, New York, 1947. 255 pages. \$3.00.

Reviewed by J. H. Salmon*

Here is a thought-provoking and practical study on economic forecasting, written in non-technical terms for the business reader. To paraphrase the authors' introductory comments, the book abandons the classical approach to economic phenomena based on endless argument on cause and effect. It is hoped the reader will discover that in economics we apparently deal with laws regarding rhythmic human responses to certain stimuli, which offer a useful guide in forecasting future trends. No attempt is made to justify by reason the course of human or natural phenomena; the thesis, accordingly, is empirical. There is tacit admission that man has not yet discovered what makes things "tick" in many phases of human experience.

In addition to indicating the underlying growth trends in many industries and in United States manufacturing as a whole, the authors isolate and project into the future a number of regularly recurring rhythms in the American economy. They suggest that business men similarly project the basic growth patterns in their own industries and individual enterprises to predict future events

or conditions.

A note of caution may be appropriate concerning the application of the prescribed methods to a specific business venture. As the authors point out, technical developments as well as major world events may alter the growth trend of business materially. The status of a particular company in relation to its industry may cause its growth trend to vary from that of the rest of the industry.

The authors present historical data revealing various rhythms which, with minor exceptions, have prevailed for extensive periods. (A rhythm is a cycle which occurs with reasonable regularity.) A 54-year rhythm is shown to have prevailed in British wheat prices since 1260 and to have dominated wholesale prices in this country (except for wartime distortion) for as far back as price records are available. It is also shown to be present in coal, iron, and lead production in England, and coal consumption in France. This rhythmic period is scheduled for its next low about 1952.

A nine-year rhythm is revealed to govern wholesale prices in Germany, Great Britain, and the United States, and common stock prices and sales of individual manufacturing companies in this country. First observed in 1860, this pattern has repeated itself nearly 10 times since discovery. Its next low should occur about the end of 1950.

A 41-month rhythm is illustrated for the Federal Reserve Board Index of Production, common stock prices, and other production and price series. Observed initially in 1923, it has repeated itself seven times since then. Its next low is due in 1948 and a second

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^{*} Shell Oil Company, Inc., New York, N. Y.

presumably steeper low toward the end of 1951.

An 181/3-year rhythm has been found to apply particularly to real estate and building activity. As might be expected, a sympathetic rhythm has prevailed in recorded marriages over some period past.

The thesis propounded by the authors challenges research into the causes underlying the various rhythmic phenomena. acknowledge the existence of various phenomena without attempting to determine their natural or human causes is a fatalistic attitude disconsonant with man's intellectual approach to the universe. If the causes can be uncovered, it is possible that cyclical periods may be extended or their amplitude reduced to our economic advantage.

The significance of this volume depends largely upon whether the regularities indicated by the rhythmic patterns are the result of chance or whether there are undetected forces-human or environmental-influencing the course of economic events.

By directing attention to the use of cyclical phenomena as a tool which-together with other available information and techniques-may be helpful in forecasting, the authors have made a distinct contribution to

economic thinking.

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[Please order directly from publishers]

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